

SUPPLEMENTARY TABLE. Incidence rate ratios* and hazard rate ratios[†] comparing mpox[§] rates by vaccination status[¶] among JYNNEOS vaccine-eligible men^{††} aged 18–49 years — 43 U.S. jurisdictions,^{§§,¶¶} July 31–October 1, 2022**

Vaccination Status	IRR (95% CI)	HRR (95% CI)
Dose 1 only	7.4 (6.0–9.1)	4.3 (3.9–4.8)
Dose 1 and dose 2	9.6 (6.9–13.2)	7.6 (5.7–10.2)

Abbreviation: IRR = incidence rate ratio. HRR = hazard rate ratio; Mpox = monkeypox; MSM = men who have sex with men; PrEP = preexposure prophylaxis.

*Comparison of incidence rates among unvaccinated to incidence among vaccinated using negative binomial regression model.

[†] Comparison of hazard rates among unvaccinated to hazard rates among vaccinated using Cox proportional hazards regression model.

[§] Confirmed (presence of mpox virus DNA by polymerase chain reaction [PCR] testing or next-generation sequencing of a clinical specimen OR isolation of mpox virus in culture from a clinical specimen) and probable (presence of orthopoxvirus DNA by PCR, or orthopoxvirus using immunohistochemical or electron microscopy or detectable levels of anti-orthopoxvirus immunoglobulin M antibody) mpox cases. Illness onset date refers to the earliest date available for each case. Dates available for selection varied by how the case was reported to the system and include illness onset, specimen collection, lab test completion, admission, diagnosis, discharge, case investigation start date, or date first electronically submitted or reported to the county, state, or public health department.

[¶] Persons were grouped into mutually-exclusive categories: unvaccinated (no documentation of vaccination), partially vaccinated (0–13 days between receipt of dose 1 and illness onset or end of the study period [whichever is earliest]), receiving first dose only (≥14 days between receipt of dose 1 and illness onset or end of the study period [whichever is earliest] and not meeting criteria for receiving first and second dose), and receiving first and second dose (≥14 days between receipt of dose 2 and illness onset or end of the study period [whichever is earliest]). Follow-up time was calculated as the time between vaccination (if applicable) or start of the study period (whichever is later) and date of illness onset (if applicable) or end of the study period (whichever is earliest).

** The population aged 18–49 years that might benefit from expanded vaccination includes MSM with HIV infection (jurisdiction-specific estimates of 2020 HIV prevalence are from CDC’s Atlas Plus [<https://www.cdc.gov/nchhstp/atlas/index.htm>] describing MSM who acquired HIV through male-to-male sexual contact or male-to-male sexual contact and injection drug use) or who are eligible for HIV-PrEP (estimated as the ratio of the jurisdiction-specific number of MSM receiving HIV preexposure prophylaxis (HIV-PrEP) and the jurisdiction-specific HIV-PrEP coverage. The number of MSM with HIV or who are eligible for HIV-PrEP aged 18–49 years was estimated by aggregating 2021 U.S. Census Bureau estimates for males aged 0–12, 13–17, 18–49, and ≥50 years, calculating the state proportion in each age group, and multiplying by the estimated number of MSM with HIV or who are eligible for HIV-PrEP in each state to obtain proportional distributions. Additional details about these methods can be obtained by contacting the corresponding author.

^{††} Self-reported male sex assigned at birth or self-reported male gender identity.

^{§§} Alabama, Alaska, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Mexico, New York (excluding New York City), North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming

^{¶¶} Jurisdictions included if age and sex assigned at birth or gender identity was available for ≥70% of cases reported, vaccination status was available for ≥50% of cases in men (male sex assigned at birth or male gender identity) aged 18–49 years or the jurisdiction confirmed that cases are linked to immunization registry entries, and deidentified vaccination administration data were submitted to CDC.